

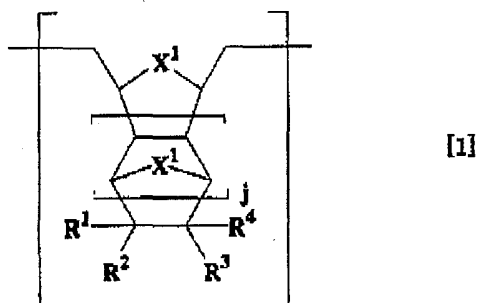
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

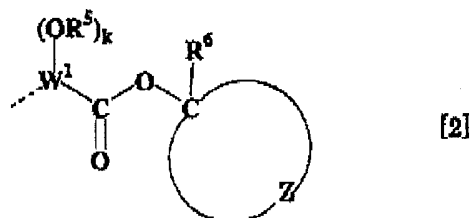
LISTING OF CLAIMS:

1.-25. (Canceled)

26. (New) A hydrogenated ring-opening metathesis polymer which contains at least one of structural unit [B] and structural unit [C] and which optionally contains structural unit [A] with structural unit [A] having the following general formula [1]:



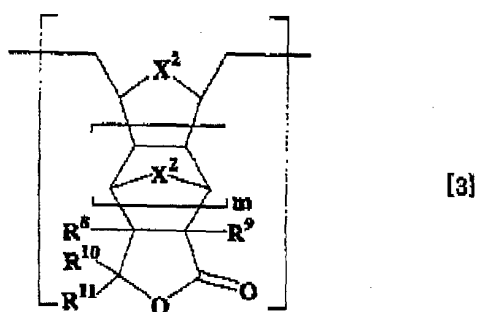
wherein, at least one of R¹ to R⁴ represents a functional group having a tertiary ester group of a cyclic alkyl of the following general formula [2]:



wherein, the chain line represents a connecting means, R⁵ represents a hydrogen atom, a linear, branched or cyclic alkyl group having 1 to 10 carbon atoms, a linear, branched or cyclic alkoxyalkyl group having 2 to 10 carbon atoms, or a linear, branched or cyclic acyl group having 1 to 10 carbon atoms, R⁶ represents a linear, branched or cyclic alkyl group having 1 to 10 carbon atoms, W¹ represents a single bond or a (k+2)-valent hydrocarbon

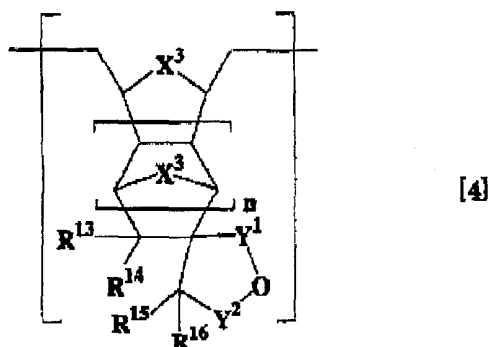
group having 1 to 10 carbon atoms, Z represents a divalent hydrocarbon group having 2 to 15 carbon atoms, and forms a single ring or a cross-linked ring together with carbon atoms to be bonded, k represents 0 or 1, and the remaining groups of R^1 to R^4 are selected each independently from a hydrogen atom, linear, branched or cyclic alkyl groups having 1 to 20 carbon atoms, halogen atoms, linear, branched or cyclic halogenated alkyl groups having 1 to 20 carbon atoms, linear, branched or cyclic alkoxy groups having 1 to 20 carbon atoms, linear, branched or cyclic alkoxyalkyl groups having 2 to 20 carbon atoms, linear, branched or cyclic alkylcarbonyloxy groups having 2 to 20 carbon atoms, arylcarbonyloxy groups having 6 to 20 carbon atoms, linear, branched or cyclic alkylsulfonyloxy groups having 1 to 20 carbon atoms, arylsulfonyloxy groups having 6 to 20 carbon atoms, linear, branched or cyclic alkoxy carbonyl groups having 2 to 20 carbon atoms, or linear, branched or cyclic alkoxy carbonylalkyl groups having 3 to 20 carbon atoms, and X^1 's are the same or different and represent -O- or $-CR^7_2$ wherein R^7 represents a hydrogen atom or a linear or branched alkyl group having 1 to 10 carbon atoms, j represents an integer of 0 or 1 to 3,

structural unit [B] having the following general formula [3]:



wherein R^8 to R^{11} each independently represent a hydrogen atom or a linear, branched or cyclic alkyl group having 1 to 10 carbon atoms, and X^2 's are the same or different and represent -O- or $-CR^{12}_2$ wherein R^{12} represents a hydrogen atom or a linear or branched alkyl group having 1 to 10 carbon atoms, m represents an integer of 0 or 1 to 3, and

structural unit [C] having the following general formula [4]:



wherein R¹³ to R¹⁶ each independently represent a hydrogen atom or a linear, branched or cyclic alkyl group having 1 to 10 carbon atoms, and X³s are the same or different and represent -O- or -CR¹⁷₂- wherein R¹⁷ represents a hydrogen atom or a linear or branched alkyl group having 1 to 10 carbon atoms, one of Y¹ and Y² represents -(C=O)- and the other of Y¹ and Y² represents -CR¹⁸₂- wherein R¹⁸ represents a hydrogen atom or a linear or branched alkyl group having 1 to 10 carbon atoms, n represents an integer of 0 or 1 to 3,

wherein at least one of X¹ in the structural unit [A] of the general formula [1], X² in the structural unit [B] of the general formula [3] and X³ in the structural unit [C] of the general formula [4] represents -O-, and

wherein the molar ratio of [A]/([B] and [C]) is 0/100 to 99/1.

27. (New) The hydrogenated ring-opening metathesis polymer according to Claim 26 wherein the molar ratio of the structural unit [A] of the general formula [1] to the structural unit [B] of the general formula [3] and the structural unit [C] of the general formula [4] ([A]/([B] and [C]) is 25/75 to 90/10.

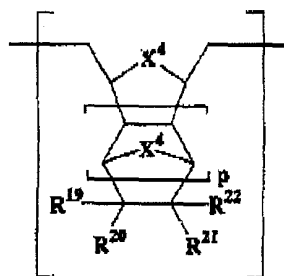
28. (New) The hydrogenated ring-opening metathesis polymer according to Claim 26 wherein the molar ratio of the structural unit [A] of the general formula [1] to the structural unit [B] of the general formula [3] and the structural unit [C] of the general formula [4] ([A]/([B] and [C]) is 30/70 to 85/15.

29. The hydrogenated ring-opening metathesis polymer according to Claim 26 wherein at least one of X^1 in the structural unit [A] of the general formula [1], X^2 in the structural unit [B] of the general formula [3] and X^3 in the structural unit [C] of the general formula [4] represents -O-, and the others represent -CH₂-.

30. (New) The hydrogenated ring-opening metathesis polymer according to Claim 26 wherein a functional group having a tertiary ester group of a cyclic alkyl of the general formula [2] selected as at least one of R^1 to R^4 in the general formula [1] is a 1-alkylcyclopentyl ester, 1-alkylnorbornyl ester or 2-alkyl-2-adamantyl ester.

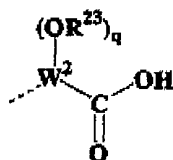
31. (New) The hydrogenated ring-opening metathesis polymer according to Claim 26 wherein W^1 in the general formula [2] represents a single bond.

32. (New) The hydrogenated ring-opening metathesis polymer according to Claim 26 wherein the material further contains a structural unit [D] of the following general formula [5]:



[5]

wherein at least one of R^{19} to R^{22} represents a functional group having a carboxyl group of the following general formula [6]:



[6]

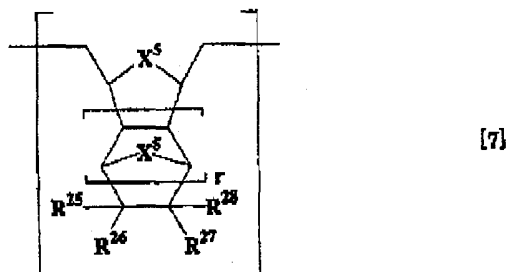
wherein the chain line represents a connecting means, R^{23} represents a hydrogen atom, a linear, branched or cyclic alkyl group having 1 to 10 carbon atoms, a linear, branched or cyclic alkoxyalkyl group having 2 to 10 carbon atoms, or a linear, branched or cyclic acyl group having 1 to 10 carbon atoms, W^2 represents a single bond or a $(q+2)$ -valent hydrocarbon group having 1 to 10 carbon atoms, q represents 0 or 1, and the remaining groups of R^{19} to R^{22} are selected each independently from a hydrogen atom, linear, branched or cyclic alkyl groups having 1 to 20 carbon atoms, halogen atoms, linear, branched or cyclic halogenated alkyl groups having 1 to 20 carbon atoms, linear, branched or cyclic alkoxy groups having 1 to 20 carbon atoms, linear, branched or cyclic alkoxyalkyl groups having 2 to 20 carbon atoms, linear, branched or cyclic alkylcarbonyloxy groups having 2 to 20 carbon atoms, arylcarbonyloxy groups having 6 to 20 carbon atoms, linear, branched or cyclic alkylsulfonyloxy groups having 1 to 20 carbon atoms, arylsulfonyloxy groups having 6 to 20 carbon atoms, linear, branched or cyclic alkoxycarbonyl groups having 2 to 20 carbon atoms, or linear, branched or cyclic alkoxycarbonylalkyl groups having 3 to 20 carbon atoms, and X^4 's are the same or different and represent $-O-$ or $-CR^{24}_2-$ wherein R^{24} represents a hydrogen atom or a linear or branched alkyl group having 1 to 10 carbon atoms, and p represents an integer of 0 or 1 to 3.

33. (New) The hydrogenated ring-opening metathesis polymer according to Claim 32 wherein the molar ratio of the structural unit [A] of the general formula [1], the structural unit [B] of the general formula [3] and the structural unit [C] of the general formula [4] to the structural unit [D] of the general formula [5] $([A]+[B]+[C])/[D])$ is from 100/0 to 20/80.

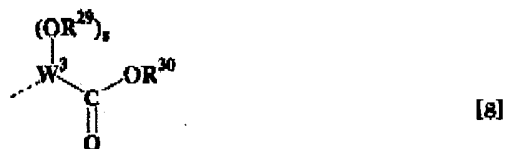
34. (New) The hydrogenated ring-opening metathesis polymer according to Claim 32 wherein X^4 in the general formula [5] represents $-O-$ or $-CH_2-$.

35. (New) The hydrogenated ring-opening metathesis polymer according to Claim 32 wherein W^2 in the general formula [6] represents a single bond.

36. (New) The hydrogenated ring-opening metathesis polymer according to Claim 26 wherein the polymer further contains a structural unit [E] of the following general formula [7]:



wherein at least one of R^{26} to R^{28} represents a functional group having a carboxylate group of the following general formula [8]:



wherein the chain line represents a connecting means, R^{29} represents a hydrogen atom, a linear, branched or cyclic alkyl group having 1 to 10 carbon atoms, a linear, branched or cyclic alkoxyalkyl group having 2 to 10 carbon atoms, or a linear, branched or cyclic acyl group having 1 to 10 carbon atoms, R^{30} represents a linear or branched alkyl group having 1 to 10 carbon atoms, a linear, branched or cyclic alkoxyalkyl group having 2 to 10 carbon atoms, or a linear, branched or cyclic halogenated alkyl group having 1 to 20 carbon atoms, W^3 represents a single bond or a (S+2)-valent hydrocarbon group having 1 to 10 carbon atoms, s represents 0 or 1 and the remaining groups of R^{25} to R^{28} are selected each independently from a hydrogen atom, linear, branched or cyclic alkyl groups having 1 to 20 carbon atoms, halogen atoms, linear, branched or cyclic halogenated alkyl groups having 1 to 20 carbon atoms, linear, branched or cyclic alkoxy groups having 1 to 20 carbon atoms, linear, branched or cyclic alkoxyalkyl groups having 2 to 20 carbon atoms, linear, branched or cyclic alkylcarbonyloxy groups having 2 to 20 carbon atoms, arylcarbonyloxy groups

having 6 to 20 carbon atoms, linear, branched or cyclic alkylsulfonyloxy groups having 1 to 20 carbon atoms, arylsulfonyloxy groups having 6 to 20 carbon atoms, linear, branched or cyclic alkoxy carbonyl groups having 2 to 20 carbon atoms, or linear, branched or cyclic alkoxy carbonyl alkyl groups having 3 to 20 carbon atoms, and X^5 s are the same or different and represent -O- or $-CR^{31}_2-$ wherein R^{31} represents a hydrogen atom or a linear or branched alkyl group having 1 to 10 carbon atoms, and r represents an integer of 0 or 1 to 3.

37. (New) The hydrogenated ring-opening metathesis polymer according to Claim 36 wherein the molar ratio of the structural unit [A] of the general formula [1], the structural unit [B] of the general formula [3] and the structural unit [C] of the general formula [4] to the structural unit [E] of the general formula [7] $([A]+[B]+[C])/[E]$ is from 100/0 to 40/60.

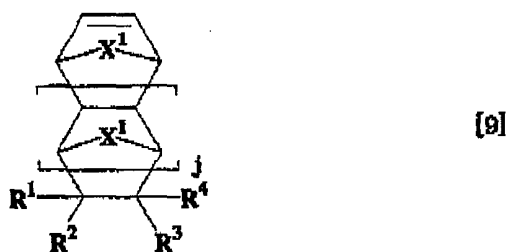
38. (New) The hydrogenated ring-opening metathesis polymer according to Claim 36 wherein X^6 in the general formula [7] represents -O- or $-CH_2-$.

39. (New) The hydrogenated ring-opening metathesis polymer according to Claim 36 wherein W^3 in the general formula [7] represents a single bond.

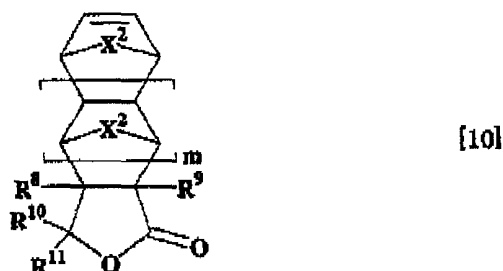
40. (New) The hydrogenated ring-opening metathesis polymer according to Claim 36 wherein the number-average molecular weight in terms of polystyrene measured by GPC is from 500 to 200,000.

41. (New) A method of producing a hydrogenated ring-opening metathesis polymer of Claim 26, comprising

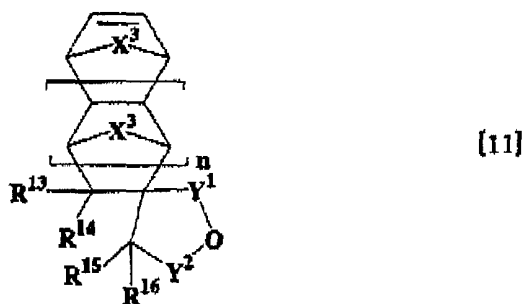
polymerizing at least one cyclic olefin monomer of general formula [10] and/or general formula [11] and optionally a cyclic olefin monomer of general formula [9] with a ring-opening metathesis catalyst, and hydrogenating the resulting polymer in the presence of a hydrogenation catalyst wherein general formula [9] is:



wherein R^1 to R^4 , X^1 and j are as defined in general formula [1], general formula [10] is:



wherein, R^8 to R^{11} , X^2 and m are as defined in the general formula [3] and general formula [11] is:



wherein, R^{13} to R^{16} , X^3 , Y^1 , Y^2 and n are as defined in the general formula [4], and wherein at least one of X^1 in the general formula [9], X^2 in the general formula [10] and X^3 in the general formula [11] represents $-O-$.

42. (New) The production method according to Claim 41 wherein the charging molar ratio of a cyclic olefin monomer of the general formula [9] to a cyclic olefin monomer of the general formula [10] and a cyclic olefin monomer of the general formula [11] is from 0/100 to 99/1.

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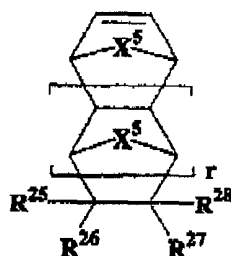
43. (New) The production method according to Claim 41 wherein the charging molar ratio of a cyclic olefin monomer of the general formula [9] to a cyclic olefin monomer of the general formula [10] and a cyclic olefin monomer of the general formula [11] is from 25/75 to 90/10.

44. (New) The production method according to Claim 41 wherein at least one of X^1 in a cyclic olefin monomer of the general formula [9], X^2 in a cyclic olefin monomer of the general formula [10] and X^3 in a cyclic olefin monomer of the general formula [11] represents $-O-$, and the others represent $-CH_2-$.

45. (New) The production method according to Claim 41 wherein a functional group having a tertiary ester group of a cyclic alkyl of the general formula [2] selected as at least one of R^1 to R^4 in the general formula [9] is a 1-alkylcyclopentyl ester, 1-alkylnorbornyl ester or 2-alkyl-2-adamantyl ester.

46. (New) The production method according to Claim 41 wherein at least part of a tertiary ester group of a cyclic alkyl in the general formula [2] is decomposed, after hydrogenation, into a carboxyl group.

47. (New) The production method according to Claim 41 wherein the method further polymerizes a cyclic olefin monomer of the following general formula [12]:



[12]

wherein, R^{25} to R^{28} , X^5 and r are as defined in the general formula [7].

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48. (New) The production method according to Claim 47 wherein at least part of an ester group is decomposed, after hydrogenation, into a carboxyl group.

49. (New) The production method according to Claim 41 wherein the ring-opening metathesis catalyst is a living ring-opening metathesis catalyst.

50. (New) The production method according to Claim 41 wherein polymerization is conducted with a living ring-opening metathesis catalyst in the presence of an olefin or diene.